

I. 34024-66 ... (m)/EWP(j) RM

ACC NR: AP6025537

SOURCE CODE: UR/0079/66/036/001/0157/0159

AUTHOR: Feshchenko, N. G.; Kirsanov, A. V. 33ORG: Institute of Organic Chemistry, AN UkrSSR (Institut organicheskoy khimii AN UkrSSR) B

TITLE: Reaction of phosphorous acid with iodine and alcohols

SOURCE: Zhurnal obshchey khimii, v. 36, no. 1, 1966, 157-159

TOPIC TAGS: phosphorus acid, iodine, alcohol, iodide, phosphoric acid, reaction mechanism, chemical reaction

ABSTRACT: A detailed study was made of the reaction of alcohols, phosphorus, and iodine, indicating that in contrast to the generally accepted scheme, iodine, phosphorus, and alcohols react in 5:1:5 ratios to form alkyl iodides and phosphoric acid monohydrate. Phosphorous acid reacts with alcohols and iodine in a 1:2:2 ratio to form phosphoric acid monohydrate and alkyl iodides. The latter reaction can be convenient and for preparative purposes. Possible reaction mechanisms are outlined. Orig. art. has: 1 formula and 2 tables. [JPRS: 35,998]

SUB CODE: 07 / SUBM DATE: 22Feb65 / ORIG REF: 003 / OTH REF: 001

Card 1/1 *plu*UDC: 546.183:547.224
0716 0925

L 31798-66 EWT(m)/EWP(j) RM

ACC NR: AP6021689

SOURCE CODE: UR/0079/66/036/003/0564/0564

AUTHOR: Feshchenko, N. G.; Kirsanov, A. V.

22
B

ORG: Institute of Organic Chemistry, AN UkrSSR (Institut organicheskoy khimii AN UkrSSR)

TITLE: Method of producing trialkylphosphine oxides directly from the alcohols, red phosphorus, and iodine

SOURCE: Zhurnal obshchey khimii, v. 36, no. 3, 1966, 564

TOPIC TAGS: alkylphosphine oxide, iodine, alcohol, chemical synthesis, phosphorus chemical production

ABSTRACT: Trialkylphosphine oxides are produced in 85-90% yields directly from the alcohols, red phosphorus, and iodine without isolating the intermediate alkyl iodides. Trialkylphosphine oxides were produced from hexyl, heptyl, octyl, nonyl, decyl, cetyl, cyclohexyl, and 3,5,5-trimethylheptyl alcohols, as well as from industrial mixtures of C₆-C₉, C₉-C₁₂, and other alcohols. [JPRS]

SUB CODE: 07 / SUBM DATE: 14Oct65 / ORIG REF: 001

LS
Card 1/1

UDC: 547.241

Feshchenko, N.P.

131-2-6/10

AUTHOR: Feshchenko, N. P.

TITLE: A Press for Small Mold Parts
(Press dlya melkoshtuornykh fazonnykh izdeliy).

PERIODICAL: Ogneupory, 1958, ²³₄ Nr 2, pp. 79-82 (USSR)

ABSTRACT:

In the Vnukov works small chamotte products of complicated shape were produced in 1956. Their weight amounted to less than 0,5 kg. It was possible to produce them according to the semidry as well as to the plastic procedure. The pressing process was conducted with the help of worm-screw presses and of lever presses, each press being operated manually by two workers and therefore showing a low output. In 1957, the author constructed an universal mechanical press, which permits operation according to the plastic as well as to the semi-dry procedure. The press is handled by a single worker, its output rate amounts to from 4000 to 4500 units per shift. Its technical data are as follows: Total pressure 6000 kg, operation strokes per minute 15, maximum dimensions of the products 250 x 250 x 150 mm, the charging with mass and the discharge of the products is effected automatically. It has friction drive, the length of the stroke of the upper stemple is 200 ± 150 mm the power of the motor is 3,2 kW, 950

Card 1/2

A Press for Small Mold Parts

131-2-6/10

revolutions per minute; it has a two-step reduction gear of the

Ts D, - 2 - 35 type,

the ratio of reduction is 31'5. It is possible to operate the press continuously as well as with an interruption after each pressing cycle. The outer dimensions are: Length - 1300 mm, width - 1050 mm, height 1850 mm, weight 420 kg. An overall view is furnished by figure 1. Subsequently the construction and the mode of operation of the press is described in detail. Figure 2 shows the coupling box of the clutch, which is subsequently described; figure 3 shows the eccentric disk. Vnukovo Refractory Materials Plant (Vnukovskiy Ogneupornyy Zavod) Library of Congress

ASSOCIATION:
AVAILABLE:
Card 2/2

15(2)

AUTHOR:

Feshchenko, N. P.

SOV/131-59-6-10/15

TITLE:

About the Working Experience With Presses SM-143
(Iz opyta ekspluatatsii pressov SM-143)

PERIODICAL:

Ogneupory, 1959, Nr 6, pp 279-282 (USSR)

ABSTRACT:

These presses have been in operation at the Vnukovo works since 1953. Normal and wedge-shaped chamotte bricks, as well as complicated, molded products with dimensions of up to 300 • 335 mm are produced on them. Reliable working of the press can be guaranteed due to regular maintenance and the perfection of several parts of the press. The overhauling of the presses is divided into two groups, i. e. the regular service, and the general overhauling. Current repair works of small parts are made daily. The general overhauling of the presses is carried out regularly in three stages, i. e. transmission, the press mechanism, and the output- and feeding-mechanism of the press. During one stage of repair the press is no longer than four working shifts out of operation. Rationalization experts of the factory improved a number of press parts, as is shown in figures 1, 2, 3, and 4.

Card 1/2

About the Working Experience With Presses SM-143

SOV/131-59-6-10/15

In conclusion one may say that the presses SM-143 which replaced the old type are simple in construction and reliable in their work though they still have deficiencies, the elimination of which will further improve their efficiency. It is necessary to develop a reliable mechanism for eliminating spilt powder and waste. The presses should be equipped with automatic central lubrication. There are 4 figures.

ASSOCIATION: Vnukovskiy ognepornyy zavod (Vnukovo Works for Refractory Products)

Card 2/2

1. FESHCHENKO, P. I.

2. USSR (600)

4. Forest Nurseries

7. Intensify control over the quality of forest seeds. Les. khoz. 5, no. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January, 1953. Unclassified.

FESHCHENKO, P.I., agronom

Using machinery for planting graft-stock and digging out transplants
in nurseries. Mekh. sil'. hosp. 10 no.3:21-23 Mr '59.

(MIRA 12:6)

(Nurseries (Horticulture)--Equipment and supplies)

FESHCHENKO, Patr Stepanovich, kand. ekon. nauk; DOLOMINO, N., red.;
POLYAKOV, I., red.; FISENKO, A., tekhn. red.

[Towards a new upsurge in state farm economy] K novomu pod"-
emu ekonomiki sovkhozov; v pomoshch' izuchaiushchim ekono-
miku sel'skogo khoziaistva. Simferopol', Krymizdat, 1961. 54 p.
(MIRA 15:11)

(Crimea—State farms)

YNSHCENKO, S. I.

Asymptotic reduction of integrals of linear ordinary differential equations containing a parameter. Dep. AN URSR no. 1:11-16 '49.

(MLBA 9:9)

1. Institut matematiki AN URSR. Predstaviv diyaniiy chlen AN URSR
M. M. Begolyubov.

(Differential equations, Linear) (Integrals)

FESHCHENKO, S. F.

Feshchenko, S. F. Estimate of the error in the asymptotic behavior of integrals of ordinary linear differential equations having a parameter. *Dopovidi Akad. Nauk Ukrain. RSR* 1951, 156-162 (1951). (Ukrainian. Russian summary)

The author considers a system of an n -vector and $n \times n$ matrix

$$\dot{x} = A(r, \epsilon)x, \quad r = \epsilon t, \quad |\epsilon| < 1$$

under the assumptions that

$$A(r, \epsilon) = \sum_{j=0}^{\infty} \epsilon^j A^j(r)$$

and that the characteristic roots $\lambda_1(r), \dots, \lambda_n(r)$ of $A^0(r)$ are such that $\lambda_i \neq \lambda_j$, $i \neq j$, $r > r_0$. In a previous paper [same *Dopovidi* 1949, no. 1] a certain formal solution of the system had been obtained. This solution is now shown to have asymptotic character and an estimate of the error of the m th approximation is given [additional reference: N. N. Bogoliubov, On some statistical methods in mathematical physics, *Izdat. Akad. Nauk Ukrain. SSR*, 1945; these Rev. 8, 37].

S. Lefschetz (Princeton, N. J.).

FESHCHENKO, S. F.

Feshchenko, S. F. Asymptotic solution of an infinite system of differential equations with slowly varying parameters. Dopovid Akad. Nauk Ukrain. RSR 1954, 82-86 (1954). (Ukrainian. Russian summary)
The infinite system

$T = P/V$

$$(1) \quad \frac{dx_n}{dt} + \omega_n x_n = \epsilon \sum_{k=1}^{\infty} A_{nk}(r) x_k + \epsilon B_n(r) e^{i\theta}$$

is considered, where ϵ is a small parameter and the ω_n are real numbers such that $\omega_n \rightarrow \infty$ as $n \rightarrow \infty$. The complex functions $A_{nk}(r)$ and $B_n(r)$ are assumed to possess derivatives with respect to r of sufficiently high order in an interval $0 \leq r \leq L$, and are such that

$$\sum_{k=1}^{\infty} \sum_{n=1}^{\infty} \frac{|d^s A_{nk}(r)|}{dr^s} < \infty, \quad \sum_{n=1}^{\infty} \frac{1}{\omega_n^s} \frac{|d^s B_n(r)|}{dr^s} < \infty$$

for $s=0, 1, 2, 3, \dots$. Solutions of the system (1) are found for the resonance and non-resonance cases. The resonance case is defined to be the case when the function $d\theta/dt = k(r)$ becomes equal to one of the numbers ω_n for some value of r in $0 \leq r \leq L$. The non-resonance case occurs when the function $d\theta/dt = k(r)$ is never equal to any one of the numbers ω_n .
H. P. Thielman (Ames, Iowa).

LFH

FESHCHENKO, S. F.

✓ Feshchenko, S. F. On the asymptotic decomposition of a 1 - F/W
system of linear differential equations. I. Ukrain.

MS Mat. Z. 77 (1955), 187-179. (Russian)

A study is made of the vector-matrix equation
(1) $dx/dt = A(r, \xi)x$; the matrix $A(r, \xi)$ (of n^2 elements)
has a suitable number of derivatives with respect to r
($0 \leq r \leq L$); $A(r, \xi) = \sum_{k=0}^{\infty} \xi^k A^{(k)}(r)$, where $r = \xi^r$, k is an
integer ($1 \leq k \leq n$), ξ is real, the roots of $\det [E - \lambda A^{(k)}(r)] = 0$
(E being the identity matrix) are denoted by $\lambda_j(r)$
($j=1, \dots, n$). The case considered is the one when for
certain r some of the $\lambda_j(r)$ are multiple. Specifically it is
assumed that $\lambda_j(r) \neq \lambda_k(r)$ for $0 \leq r \leq L$ and for $i \neq j$, $i > r$.
The solution of (1) is of form $x = U_1(r, \xi)\zeta_1 + U_2(r, \xi)\zeta_2$,
where $d\zeta_r/dt = A_r(r, \xi)\zeta_r$ ($r=1, 2$) and the U_r , A_r are
certain matrices having formal matrix expansions in
powers of ξ ; ζ_1 , ζ_2 are vectors of r and $n-r$ elements,
respectively. The author states that by means of these
formal series the asymptotic decomposition of (1) can be
realized into two systems of orders r and $n-r$.

W. J. Trjitzinsky (Urbana, Ill.).

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Smirnov

FESHCHENKO, S.F.

4000
Feshchenko, S. F. Estimate of the error in the asymptotic solution of an infinite system of differential equations with slowly varying coefficients. *Dopovidi Akad. Nauk Ukrain. RSR* 1955: 211-216. (1955). (Ukrainian.)

X - F/V

Russian summary
The same infinite system of differential equations is considered as that given in an earlier paper by the author [same Dopovid 1954, 82-86; MR 15, 1111]. The present paper establishes the convergence of the formal solution of the given system of differential equations and gives an estimate of the error of the m th approximation for the solution.
E. P. Thilman (Ames, Iowa).

FESHCHENKO, S.F.; KUZHIY, A.I.

On the time of removing an end load from an immobile base with a mine hoist cable. Dop. AN URSS no.2:126-133 '55. (MIRA 8:11)

1. Institut matematiki Akademii nauk URSS ta Kiivs'kiy pedinstitut imeni Gor'kogo. Predstaviv diysniy chlen Akademii nauk URSS G.N. Savin

(Elasticity) (Mine hoisting)

FESHCHENKO, S.F.

SUBJECT USSR/MATHEMATICS/Differential equations CARD 1/1 PG - 60
 AUTHOR FESHCHENKO S.F.
 TITLE On the asymptotic splitting up of a system of linear differential equations II. (Error estimation).
 PERIODICAL Ukrain.mat. Zhurn. 7, 443-452 (1955)
 reviewed 6/1956

This paper is the continuation of an earlier paper in which the theory of the asymptotic splitting up of a linear differential system into independent differential systems of lower order was established. There, as results formal developments were established which proceed to powers of a "small" parameter and on the convergence of which nothing was said. Now the author shows that if these formal infinite series are replaced by the approximations of m-th order, then the appearing approximate solutions indeed converge to the solutions of the initial differential system, where the convergence is exponential in m.

FESHCHENKO, S.F. (Kiyev); SHKIL', N.I. [Shkil', M.I.] (Kiyev)

Determining stresses in an elastic viscous string of variable length. Prykl.mekh. 4 no.3:269-276 '58. (MIRA 13:8)

1. Kiyevskiy pedagogicheskiy institut.
(Elastic rods and wires)

21-58-5-3/28

AUTHORS: Feshchenko, S.F. and Shkil', N.I.

TITLE: On the Asymptotic Solution of a Special System of Ordinary Linear Differential Equations (Ob asimptoticheskom reshenii spetsial'noy sistemy obyknovennykh lineynykh differentsial'nykh uravneniy)

PERIODICAL: Dopovidi Akademii nauk Ukrain's'koi RSR, 1958, Nr 5, pp 482-485 (USSR)

ABSTRACT: The authors consider a system of ordinary linear differential equations which can be written in the vector-matrix form as follows:

$$E_1 \frac{dX}{dt'} = A(t')X + E_1 B(t')e^{i\theta}$$

where $A(t')$ is a square matrix of n -order; X and $B(t')$ are n -dimensional vectors, and E_1 is a square matrix of the n -order of the form:

$$E_1 = \{1, 1, \varepsilon, \varepsilon, \dots, \varepsilon\}$$

Introducing a new independent variable, $t' = \varepsilon t = \tau$, the authors prove two theorems with the aid of which the asymptotic solution of the system of differential equations under

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21-58-5-3/28

On the Asymptotic Solution of a Special System of Ordinary Linear Differential Equations

consideration can be found. Two particular cases are analyzed:

1) the "resonance" case with certain values of τ from the segment $0 \leq \tau \leq L$, when the function $i \frac{d\theta}{d\tau} = ik(\tau)$ may become equal to one of the roots of the characteristic equation of matrix $A^0(\tau)$, e.g., to the root $\lambda_j(\tau)$ which is assumed to be a second multiple purely imaginary root; and 2) the "non-resonance" case, when

$$ik(\tau) \neq \lambda_j(\tau) \quad (j = 1, 2, \dots, n)$$

in the segment $0 \leq \tau \leq L$ where $\lambda_j(\tau)$ are roots of the same characteristic equation.

There are 3 Soviet references.

ASSOCIATION: Institut matematiki AN UkrSSR (Institute of Mathematics of AS UkrSSR)

PRESENTED: By Member of the AS UkrSSR, I.Z. Shtokalo

SUBMITTED: October 23, 1957
Card 2/3

21-58-5-3/28

On the Asymptotic Solution of a Special System of Ordinary Linear Differential Equations

NOTE:

Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

1. Linear equations--Theory

Card 3/3

SAVIN, G.M. [Savin, H.M.], akademik: ~~FESHCHENKO~~, S.P.

Asymptotic solution of a class of partial differential equations with variable boundary conditions. Dop. AN URSS no.6:588-594 '58.
(MIRA 11:9)

1. Institut matematiki AN URSS. 2. AN URSS (for Savin).
(Differential equations, Partial)

88305

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S/041/60/012/004/006/011
C111/C222

AUTHORS: Feshchenko, S.F., and Shkil', N.I.

TITLE: Asymptotic Solutions of a System of Linear Differential Equations
With a Small Parameter for the Derivatives

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1960, Vol. 24, No. 4,
pp. 429 - 438

TEXT: The authors consider the equation

$$(4) \quad \frac{dx}{dt} = [A_0(\tau) + \epsilon A_1(\tau)] x + \epsilon B(\tau) e^{i\theta(\tau)}$$

where $\tau = \epsilon t$, $B(t)$ is an n -dimensional vector and

$$(5) \quad A_0(\tau) = \begin{pmatrix} 0 & 0 & \dots & 0 \\ 0 & 0 & \dots & 0 \\ a_{31}(\tau) & a_{32}(\tau) & \dots & a_{3n}(\tau) \\ \dots & \dots & \dots & \dots \\ a_{n1}(\tau) & a_{n2}(\tau) & \dots & a_{nn}(\tau) \end{pmatrix}, \quad A_1(\tau) = \begin{pmatrix} a_{11}(\tau) & \dots & a_{1n}(\tau) \\ a_{21}(\tau) & \dots & a_{2n}(\tau) \\ 0 & \dots & 0 \\ \dots & \dots & \dots \\ 0 & \dots & 0 \end{pmatrix}.$$

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Asymptotic Solutions of a System of Linear Differential Equations With a Small Parameter for the Derivatives

It is assumed that the $a_{ij}(\tau)$ the components of $B(\tau)$, and the function

$$(6) \quad k(\tau) = \frac{d\theta(\tau)}{d\tau}$$

have derivatives of all orders with respect to τ on $0 \leq \tau \leq L$. A solution of (4) is sought which satisfies

$$(7) \quad (x)_{\tau=0} = x_0.$$

If $\lambda_i(\tau)$, $i = 1, \dots, n$ are the roots of

$$(8) \quad \det |A_0(\tau) - \lambda E| = 0,$$

then

$$(9) \quad \lambda_1(\tau) \equiv \lambda_2(\tau) \equiv 0.$$

Let the other roots be simple on $[0, L]$, where

$$(10) \quad \lambda_j(\tau) = i\omega_j(\tau).$$

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Asymptotic Solutions of a System of Linear Differential Equations With a Small Parameter for the Derivatives

Then there exists a non-singular matrix $V(\tau)$ so that

$$(11) \quad V^{-1}(\tau) A_0(\tau) V(\tau) = W(\tau),$$

where

$$(12) \quad W(\tau) = \begin{pmatrix} W_1(\tau) & 0 \\ 0 & W_2(\tau) \end{pmatrix}$$

and

$$(13) \quad W_1(\tau) = \begin{pmatrix} 0 & 1 \\ 0 & 0 \end{pmatrix}, \quad W_2(\tau) = \begin{pmatrix} \lambda_3(\tau) & 0 & \dots & 0 \\ 0 & \lambda_4(\tau) & \dots & 0 \\ \dots & \dots & \dots & \dots \\ 0 & 0 & \dots & \lambda_n(\tau) \end{pmatrix}.$$

In the present paper the solution is constructed in the case of resonance, i.e. if $k(\tau)$ in isolated points equals $\alpha(\tau)$ but for no $\tau \in [0, L]$

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Asymptotic Solutions of a System of Linear Differential Equations With a Small Parameter for the Derivatives

equals the other roots of (8).

Theorem 1 asserts that if the above conditions are satisfied and the matrix

$V^{-1}(\tau) \left[A_1(\tau)V(\tau) - \frac{dV(\tau)}{d\tau} \right]$ is so that for all $\tau \in [0, L]$ it holds

$$(14) \quad \left\{ V^{-1}(\tau) \left[A_1(\tau)V(\tau) - \frac{dV(\tau)}{d\tau} \right] \right\}_{21} \neq 0,$$

then the formal solution of (4) in the case of resonance admits the representation

$$(15) \quad x = U_1(\tau, \mu) \zeta_1 + [U_2(\tau, \mu) \zeta_2 + P(\tau, \mu) e^{i\theta(\tau)}],$$

where the 2-dimensional vector ζ_1 and the (n-2)-dimensional vector ζ_2 are determined by

$$\frac{d\zeta_1}{dt} = \alpha_1(\tau, \mu) \zeta_1$$

$$(16) \quad \text{Card } 4/6 \quad \frac{d\zeta_2}{dt} = [\alpha_2(\tau, \mu) - ik(\tau)E] \zeta_2 + z(\tau, \mu),$$

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Asymptotic Solutions of a System of Linear Differential Equations With a Small Parameter for the Derivatives

while U_1 and U_2 are rectangular matrices, $\mathcal{O}_1(\tau, \mu)$ is a matrix of second order, $\mathcal{O}_2(\tau, \mu)$ is a quadratic matrix of the order $(n-2)$; P and Z are vectors with n and $(n-2)$ components, respectively. The determination of all these coefficients of (16) is carried out with the aid of the formal series arrangement

$$(17) \quad \begin{aligned} U_j(\tau, \mu) &= \sum_{s=0}^{\infty} \mu^s U_j^{(s)}(\tau), \quad \mathcal{O}_j(\tau, \mu) = \sum_{s=0}^{\infty} \mu^s \mathcal{O}_j^{(s)}(\tau) \quad j=1,2, \\ P(\tau, \mu) &= \sum_{s=2}^{\infty} \mu^s P^{(s)}(\tau), \quad Z(\tau, \mu) = \sum_{s=2}^{\infty} \mu^s Z^{(s)}(\tau). \end{aligned}$$

In order to show that the solution x constructed in this way is asymptotical, the authors introduce the vector \tilde{x}_m which originates from the vector x by restriction to m -th partial sums in the sums of (17). Theorem 2 asserts: If beside of the conditions of theorem 1 there still

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S/041/60/012/004/006/011
C111/C222

Asymptotic Solutions of a System of Linear Differential Equations With a Small Parameter for the Derivatives

holds

$$\operatorname{Re} \left(\left\{ v^{-1}(\tau) \left[A_1(\tau) v(\tau) - \frac{dv(\tau)}{d\tau} \right] \right\}_{21} \right) < 0$$

(49)

$$\operatorname{I} \left(\left\{ v^{-1}(\tau) \left[A_1(\tau) v(\tau) - \frac{dv(\tau)}{d\tau} \right] \right\}_{21} \right) \equiv 0 ,$$

where Re is the real part and I is the imaginary part, then for arbitrary $L > 0$ and $0 < \mu \leq \mu_0$ it holds

$$(54) \quad |x - x_m| \leq \mu^{m-5} C ,$$

where C is a constant not depending on μ .
There are 5 Soviet references.

SUBMITTED: May 21, 1960

Card 6/6

FESHCHENKO, S.F.; NIKOLENKO, L.D.

Performance of calculations connected with the asymptotic break-up of a system of ordinary linear differential equations on a high-speed computer. Dop. AN URSR no.8:990-993 '61. (MIRA 14:9)

1. Institut matematiki AN USSR. Predstavleno akademikom AN USSR I.Z. Shtokalo.

(Electronic calculating machines)

(Differential equations, Linear)

FESHCHENKO, S.F. (Kiyev); NIKOLENKO, L.D. (Kiyev)

Note on the numerical break-up of a system of ordinary linear
differential equations. Ukr. mat. zhur. 13 no.3:109-113 '61.
(MIRA 14:9)

(Differential equations, Linear)

FESHCHENKO, S. F.; NIKCLENKO, L. D. (Kiev)

"Asymptotische Zerlegung eines Systems linearer Differentialgleichungen und einige Anwendungen auf die Theorie der Schwingungen mechanischer Systeme."

report presented at the 3rd Conf on Nonlinear Oscillations, E. Berlin, 25-30 May 64.

ACCESSION NR: AP4015118

S/0041/64/016/001/0132/0135

AUTHORS: Feshchenko, S. F. (Kiyev); Shchil, N. I. (Kiyev)

TITLE: Error estimation for asymptotic representation of solutions of linear differential equation systems containing a parameter

SOURCE: Ukr. matem. zhurnal, v. 16, no. 1, 1964, 132-135

TOPIC TAGS: error estimation, asymptotic representation, linear differential equation, ordinary differential equation

ABSTRACT: The following system of linear differential equation is considered:

$$\frac{dx}{dt} = A(\tau, \varepsilon)x + \varepsilon B(\tau, \varepsilon)e^{i0},$$

where x and B are n -dimensional vectors, $A(\tau, \varepsilon)$ is a real square matrix of order n ,

$$A(\tau, \varepsilon) = \sum_{n=0}^{\infty} \varepsilon^n A^{(n)}(\tau), \quad B(\tau, \varepsilon) = \sum_{n=0}^{\infty} \varepsilon^n B_{(n)}^{(0)}.$$

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ACCESSION NR: AP4015118

$$A^{(n)}(\tau) \neq 0, \quad 0 \leq \tau = at < L,$$

and ϵ is a small positive parameter. An algorithm for the construction of approximate solutions was given by N. I. Shkil' (UMZh t. XIV, No. 4, 1962). The asymptotic character of these approximate solutions is given in this paper. Orig. art. has: 23 equations.

ASSOCIATION: none

SUBMITTED: 26Dec62

DATE ACQ: 16Mar64

ENCL: 00

SUB CODE: MM

NO REF SOV: 002

OTHER: 000

Card 2/2

KOMARENKO, A.N. (Kiyev); LUKOVSKIY, I.A. (Kiyev); FESHCHENKO, S.F. (Kiyev)

Problem involving eigenvalues with a parameter under boundary conditions. Ukr. mat. zhur. 17 no.6:22-30 '65.

(MIRA 19:1)

1. Submitted September 21, 1965.

FESENCHENKO, V.G.

Chemical Abstr.
Vol. 48 No. 8
Apr. 25, 1954
Electrochemistry

Polarization of copper during anodic solution in CuSO_4 , H_2SO_4 solutions. B. F. Markov and V. G. Feshchenko. *Ukrain. Khim. Zhur.* 17, 547-550 (1953) (in Russian).
Polarization η of Cu in $2N \text{ CuSO}_4 + 2$ to $0.01N \text{ H}_2\text{SO}_4$ were detd. as a function of c.d., temp., H_2SO_4 concn., and time. As the temp. increased, η decreased steeply and finally vanished at the b.p. of the electrolyte. This was most pronounced at higher H_2SO_4 concns. Isotherms (18, 25, and 60°) of η vs. acid concn. approached linearity. The slopes decreased and became zero at 60° . This was explained by the assumption that H^+ ions were adsorbed on the surface of the anode, forming a layer through which Cu^{2+} ions passed to enter the soln. This was supported by the electrocapillary characteristics of Hg and by the work of Borisova, *et al.*, (C.A. 43, 470i) and Venstrom, *et al.* (C.A. 44, 500i). The surface tension of electrocapillary max. of Hg in $N \text{ KCl}$, KCNS , b.Br. , and KCl decreased, in the order given, as the temp. rose to 60° . $\log \eta$ vs. $\log(c.d.)$ for $2.0 - 0.01N \text{ H}_2\text{SO}_4$ were straight lines, and the data were satisfactorily expressed by $\log \eta = \text{const.} + \alpha \log(c.d.)$. Curves of η vs. time (cf. Vagaryan, *et al.*, C.A. 44, 4803d) suggested a slight passivation of the surface at lower H_2SO_4 concn.

I. Benecowitz

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000412920013-9

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SHEYKO, I.N., FESHCHENKO, V.G.

Note on N.S. Kavetskii's review of the article "Study of the
decomposition potential of the system K_2ZrF_6 - NaCl - KCl."
Ukr. khim. zhur 26 no.3:394-395 '60. ⁶(MIRA 13:7)
(Potassium zirconium fluoride) (Electrolysis)

S/073/60/026/003/011/011/XX
B023/B060

AUTHORS: Sheyko, I. N. and Feshchenko, V. G.

TITLE: On the Occasion of N. S. Kavetskiy's Review of the Article "Study of the Decomposition Voltage of the K_2ZrF_6 - NaCl - KCl System"

PERIODICAL: Ukrainskiy khimicheskii zhurnal, 1960, Vol. 26, No. 3, pp. 394-395

TEXT: N. S. Kavetskiy states without producing any experimental or theoretical proof that the diaphragm provided with an opening, used by the authors in their investigation (Ref. 1), functions as a bipolar electrode. He bases on this unjustified statement to declare that the method applied by the authors is wrong. It is a known fact, so the authors go on, that a plate or a net or a substance exhibiting electrical conductivity, may function also as a diaphragm, and not only as a bipolar electrode. This depends on the construction of the electrolytic cell and on its working conditions. This ability has been widely exploited in numerous electrolytic cells of industrial and laboratory types (Refs. 4-6). Graphite diaphragms with an opening of 1-2 mm in diameter have been applied

Card 1/3

On the Occasion of N. S. Kavetskiy's Review
of the Article "Study of the Decomposition
Voltage of the K_2ZrF_6 - NaCl - KCl System"

S/073/60/026/003/011/011/XX
B023/B060

by many authors for determining the decomposition potentials of molten salts (Refs. 7-11). The methods in question have been taken from the literature itself. The values of the decomposition potentials obtained both with application of the graphite diaphragm and without, are indicated in a table. The compilation of these data shows that in the studies by V. S. Molchanov (Ref. 7), by S. I. Sklyarenko and O. S. Druzhinina (Ref. 9), by Yu. K. Delimarskiy and F. F. Grigorenko (Ref. 10) the graphite diaphragm was no bipolar electrode. Even less, in the authors' statement, could this be assumed for their own investigation. The diaphragm was 3 mm thick, the opening was 5 mm in diameter, the crucible was made from a sufficiently porous graphite "Б" ("B"). Molten fluorides are so quick in passing through such graphite that the crucibles "leak" already after the first test. The authors therefore had to take a new crucible for each test. All this ensured the electrical conductivity. Nevertheless, after having read Kavetskiy's criticism, the authors carried out special tests to clarify whether the graphite diaphragm may act as bipolar electrode under the conditions of paper (Ref. 1). The very first test by which they determined the decomposition potential of lead chloride at 600°C and obtained

Card 2/3

On the Occasion of N. S. Kavetskiy's Review
of the Article "Study of the Decomposition
Voltage of the K_2ZrF_6 - NaCl - KCl System"

S/073/60/026/003/011/011/XX
B023/B060

the value 1.25 v (which fits the data from literature per Ref. 12) contradicts Kavetskiy's statement concerning the additional polarization, said to have taken place in the investigation (Ref. 1). Consequently, all his objections concerning the interpretation of the J-V curves are annulled. Kavetskiy's remark stating the impossibility of studying the electrode polarization in the precipitation of zirconium with the aid of a zirconium reference electrode is based on a misunderstanding. This generally applied method of investigating the electrode polarization and the difference among the potentials between two equal electrodes is explained by concentration polarization and the partial irreversibility of the electrode processes. A paper by V. S. Lyashchenko (Ref. 15) is mentioned. There are 1 table and 15 references: 12 Soviet, 2 US, and 1 Italian. ✓

Card 3/3

SHEYKO, I.N.: FESHCHENKO, V.G. [Feshchenko, V.H.]

Determination of the decomposition potentials of fused salts
in graphite cells. Ukr. khim. zhur. 27 no.4:473-478 '61.
(MIRA 14:7)

1. Institut obshchey i neorganicheskoy khimii AN USSR.
(Salts) (Electromotive force)

SHEYKO, I.N.; FESHCHENKO, V.G.

Partial pressure of beryllium chloride vapors in a mixture with
sodium and potassium chlorides. Ukr.khim. zhur. 28 no.4:478-483
'62. (MIRA 15:8)

1. Institut obshchey i neorganicheskoy khimii AN USSR.
(Beryllium chloride) (Vapor pressure)

CHERNOBYL'SKIY, I.I., doktor tekhn. nauk; FESHCHENKO, V.S., inzh.;
SIDORENKO, S.V., inzh.

Investigating the drying of lactose on a vibratory drying conveyor.
Khim. mashinostr. no.1:74-81 '65. (MIRA 18:9)

18.8300

33836

S/137/62/000/001/172/237

A006/A101

AUTHORS: Kozmanov, Yu. D., Feshchukova, T. T.

TITLE: Investigation of high-temperature oxidation of tungsten-rhenium alloys

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 77, abstract 11546
("Tr. Ural'skogo politekhn. in-ta", 1961, no. 114, 120 - 128)

TEXT: Addition of up to 5% Re at 660 - 900°C increases, and at 1,000 - 1,100°C, somewhat reduces heat resistance of tungsten. A further increase of the Re content (up to 20%) has a slight effect on heat resistance of tungsten. The authors revealed the "catastrophic" oxidation of alloys containing the ζ -phase. An X-ray phase analysis and material balance indicate an almost complete evaporation of Re oxides from the scale during the oxidation process. In the scale of W-Re alloys, only a phase with the α -WO₃ structure and the β -phase (W₂₀O₅₈) were revealed by X-rays. There are 10 references.

Author's summary

[Abstracter's note: Complete translation]

Card 1/1

S/081/62/000/001/030/067
B151/B101

18.1800
AUTHORS:

Kozmanov, Yu. D., Feshchukova, T. T.

TITLE:

Investigation of the high-temperature oxidation of alloys consisting of tungsten and rhenium

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 1, 1962, 305-306, abstract 11180 (Tr. Ural'skogo politekhn. in-ta, sb. 114, 1961, 120-128)

TEXT: A study of the high-temperature oxidation of Re and W in relation to cast W - Re alloys containing 0.5; 0.99; 2.0; 5.0; 10.0; 20.0; 57.5; 64.0; 67.5 % by weight Re shows that additions of Re of up to 5%, at temperatures of 600-900°C, increase the heat stability of the W and at 1000-1100°C decrease it somewhat. A further increase in the Re content (up to 20%) shows an insignificant effect on the heat stability of the W. X-ray phase-analysis shows that the oxide layer consists of two layers; the inside scale layer has a β -phase structure ($W_{20}O_{58}$) while the outside has a WO_3 structure. The presence of independent phases of the Re oxides in

Card 1/2

X

Investigation of the high-temperature ...

S/081/62/000/001/030/067
B151/B101

in the scale could not be shown. Re-W alloys containing the γ -phase are oxidized in a temperature range of 700 - 900°C with a velocity which is approximately that of the oxidation of Re, i.e. very quickly, "catastrophically". At the same time a single-layer, very unstable scale is formed. [Abstracter's note: Complete translation.]

Card 2/2

FESHIN, G.N. (Belgorod)

Certain errors in the solving of equations. Mat. v shkole no.6:
67 N-D '59. (MIRA 13:3)
(Equations)

KISLYUK, I.V., kand.tekhn.nauk; LIPKOV, I.A.; FESHINA, M.P., inzh.

Manufacture of piece-knitted outer garments on circular
machines. Nauch.-issl.~~study~~ VNIITP no.2:61-98 '60.
(MIRA 16:2)

(Knit goods)
(Knitting machines)

FESIK, H., inzh. (g.Mukachevo)

Planting on hexagonally arranged hills. Nauka i pered. op. v sel'khoz
9 no.10:49-51 0 '59 (MIRA 13:3)
(Corn(Maize))

FESIK, S. P.

Cand Tech Sci - (diss) "Problems of the estimation of statically undetermined frames of the lowest weight." Khar'kov, 1961. 13 pp; (Ministry of Higher Education Ukrainian SSR, Khar'kov Construction Engineering Inst); 180 copies; free; (KL, 7-61 sup, 247)

VINOGRADOV, A.I. [Vynohradov, O.I.] (Khar'kov); FESIK, S.P. [Fesyk, S.P.]
(Khar'kov)

Optimum stress distribution in combined systems. Prykl.mekh. 7 no.2:
157-163 '61. (MIRA 14:4)

1. Khar'kovskiy institut inzhenerov zheleznodorozhnogo transporta.
(Strains and stresses)

FESIK, S.P. (Khar'kov)

Minimum weight of formerly statically indeterminable frames. Stroi.
mekh. i rasch. soor. 3 no.1:32-37 '61. (MIRA 14:2)
(Structural frames)

FESIK, S.P., kand.tekhn.nauk

"Reverse problem of the theory of structures." Nauch.trudy KHIIF
no.58:22-32 '62.

"Minimum-weight design of frames for temporary loads." Ibid.:33-46
(MIRA 16:12)

VINOGRADOV, A.I.; FESIK, S.P. (Khar'kov)

Statically indeterminate frames with the least weight. Stroi. mekh.
i rasch. scor. 4 no.3:11-14 '62. (MIRA 15:6)
(Structural frames)

FESIK, S. P. (Khar'kov)

"On the optimum distribution of forces in statically indeterminate beams and frames with elements of constant section".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964.

FESIK, V.N., kand.sel'skokhoz.nauk

Lines of Red Steppe cattle in Stavropol Territory. Zhivotnovodstvo
23 no.2:65-70 F '61. (MIRA 15:11)
(Stavropol Territory--Dairy cattle breeding)

LESNICHYI, Kondrat Leont'yevich [Lisnychy, K.L.]; PESINA,
Anatoliy An'c'ovich [Pesyna, A.A.]; SKRYPNYK, P.S.
[Skrypnyk, P.S.], red.

[The collective farm economist] Ekonomist kolhospu. Kyiv,
Urozhai, 1964. 86 p. (MIRA 17:10)

Fesko, K. Ya.

14-1-788-D

Translation from: Referativnyy Zhurnal, Geografiya, 1957, Nr 1,
p. 96 (USSR)

AUTHOR: Fesko, K. Ya.

TITLE: Problems of Water Control in Saline Soil Within the
Aleysk Irrigation System (Voprosy regulirovaniya vodnogo
rezhima zasolennykh pochv Aleyskoy orositel'noy systemy)

ABSTRACT: Bibliographic entry on the author's dissertation for the
degree of Candidate of Technical Sciences, presented to
the Omsk Agricultural Institute (Omskiy s.-kh. in-t)
Omsk, 1956.

ASSOCIATION: Omsk Agricultural Institute (Omskiy s.-kh. in-t)

Card 1/1

USSR/Soil Science. Tillage. Melioration. Erosion:

J-5

Abstr Jour : Ref Zhur - Biol., No 10, 1958, No 43884

Author : Fesko K. Ya.

Inst : Not Given

Title : The Control of Soil Water Conditions

Orig Pub : S. kh. Sibiri, 1957, No 8, 86-92

Abstract : The southern chernozems of the Aloyaskaya Irrigation System are becoming denser on the influence of moisture and are rapidly losing their porosity. Deep plowing (to 50 cm.) creates the best conditions for the accumulation of moisture through precipitation, although also helping to dry out the soil to the depth it has been made friable in the arid period. With deep plowing (up to 50 cm.) and with irrigation a sugar beet root yield boost of 5.8-13.4 centners per ha. and that of its seeds of 3.6 centners per ha. were obtained. --Ye.A. Dmitriyev

Cerd : 1/1

FESKO, K.Ya.; STRUGALEVA, Ye.V.

Deep plowing as means of regulating water and salt conditions
of soils of the Aley Irrigation System [with summary in English].
Pochvovedenie no.1:104-112 Ja '59. (MIRA 12:2)

1. Altayskiy sel'skokhozyaystvennyy institut.
(Aley Valley--Soils)

Country : USSR
Category : Soil Science. Cultivation. Improvement.
Erosion. J
Abs Jour : RZhBiol., No 6, 1959, No 24672
Author : Orlovskiy, N. V.; Fesko, K. Ya.; Goppe, G. S.;
Strugalova, Ye. V.
Inst : Tomsk University.
Title : Salination of Soils in the Aley Irrigation
System and Measures of Prevention and Control
Thereof.
Orig Pub : Tr. Tomskogo un-ta, 1957, 140, 82-91
Abstract : The Aley irrigation system is the largest in
Altay Kray; its total area consists of 11,000
hectares. The Soil-Improvement Expedition of
the Altay Agricultural Institute investigated
on the irrigated territory of the Ruhtsov Sugar-
Beet Collective Farm causes of secondary salina-
Card : 1/3

Country : USSR
Category : Soil Science. Cultivation. Improvement. Erosion. J

Abs Jour : RZhBiol., No 6, 1959, No 24672

Author :
Inst :
Title :

Orig Pub :

Abstract : tion and methods of its control. After 20 years of irrigation, almost the entire territory is in the grip of secondary salination processes of various intensity. The fundamental reason of soil salination are the very costly mineralized subsoil waters. It is recommended: (1) a strict differentiation of irrigation; (2) realization of planned irriga-

Country : USSR
Category : Soil Science. Cultivation. Improvement. Erosion.

Card : 2/3

Abs Jour : RZhBiol., No 6, 1959, No 24672

61

Orig Pub :

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000412920013-9"

Abstract : ted fields, (3) measures to reduce water infiltration from the canals; (4) creation of a thick structural arable layer, and (5) strengthening the role played by perennial grasses in crop rotation, etc. -- G. B. Zakhar'ina

Card : 2/3

1-25-40 2. A.
ZIBITSKER, D.Ye.; SELIVANOV, Ya.M.; PES'KO, T.A.; GOSILOVSKAYA, A.Ye.

Vaccination against influenza in the White Russian S.S.R. Vop.virus.
1 no.6:43-47 N-D '56 (MIRA 11:3)

1. Belorusskiy institut epidemiologii, mikrobiologii i gigeny, Minsk.
(INFLUENZA, prev. and control
vacc., statist. in Russia)

KOMSKAYA, M.S. [Koms'ka, M.S.], kand.tekhn.nauk; FES'KO, Zh.S., inzh.

Rapid method for determining the granulometric composition of the clay slips. Leh.prom. no.1:84-85 Ja-Mr '63. (MIRA 16:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut stekol'noy i farforo-fayansovoy promyshlennosti.

KOMSKAYA, M.S. [Koms'ka, M.S.], kand.tekhn.nauk, FES'KO, Zh.2.

New method for the dressing of kaolin. Leh.prom.
no.1:70-72 Jan-Mar '64.

(MIRA 19:1)

FES'KOV, G.P.

For proper organization of the work of efficiency experts and
inventors. Vest. svyazi 16 no.3:25 Mr '56. (MIRA 9:7)

1. Glavnyy inzhener Velikolukskogo oblastnogo upravleniya svyazi.
(Telecommunication)

ROMENSKIY, I. P., kand.tekhn.nauk; FES'KOV, M. I., inzh.

The UPAR-01 unit for calibrating the ASO-3 manual vane anemometers.
Bezopatruda v prom. 5 no.11:21-23 N '61. (MIRA 14:11)

1. Voroshilovskiy gornometallurgicheskiy institut.
(Anemometer)

ROMENSKIY, L.P., kand.tekhn.nauk; FES'KOV, M.I., gornyy inzh.; BELINSKIY, M.L., kand.tekhn.nauk

Planning and design of ventilation in the reorganization of Donets Basin mines. Ugol' Ukr. 6 no.9:19-21 S '62. (MIRA 15:9)

1. KommunarSKIY gorno-metallurgicheskiy institut (for Romenskiy, Fes'kov). 2. Shakhta No.1 "Krasnaya Zvezda" Chistyakovskogo tresta predpriyatiy ugol'noy promyshlennosti Donbassa Ministerstva ugol'noy promyshlennosti SSSR (for Belinskiy).
(Donets Basin—Mine ventilation)

VORONKOV, F.F.; FESKOVETS, V.S.

Dust collection by air filter systems of main-line electric
locomotives. Sbor. nauch. trud. EINI 2:219-228 '62.
(MIRA 16:8)

(Electric locomotives--Ventilation)
(Dust collectors)

FESKOVICH, D.

Establishing norms for calculating technically based
output standards in steel-wire production. Biul.nauch.
inform: trud i sar.plata 3 no.7:24-28 '60.
(MIRA 13:8)
(Moscow--Metallurgical plants--Production standards)
(Wire)

MINAR, Jiri; LAHN, Vilem; FESSL, Vaclav

Value of the determination of transaminases in clinical anesthesiology.
Cas. lek. cesk. 98 no.35:1100-1104 28 Aug 59

1. KUNZ - fakultni nemocnice, anesteziologicke oddeleni, vedouci
lekar MUDr. J. Mindar. Interni klinika lek. fakulty KU se sidlem v
Plzni, prednosta prof. MUDr. K. Bobek. I. chirurgicka klinika lek.
fakulty KU se sidlem v Plzni, prednosta doc. MUDr. K. Domansky.
(TRANSAMINASES, blood)
(ANESTHESIA, blood)

MATEJICEK, Jan; MINAR, Jiri; FESSL, Vaclav

Hazards related to Trendelenburg's position. Cesk. gyn. 26 [40]
no.7:511-515 48. 1961.

1. MUNZ Plzen, gyn. por. odd., reditel MUDr. Milan Sedlak Anesteziologicke oddeleni SFN Pizen, prim. MUDr. Jiri Minar I chir. klin. KU v Pizni, prednosta doc. MUDr. Karel Domansky.
(GYNECOLOGY)

MINAR, Jiri; FESSL, Vaclav

Some pharmacological aspects in clinical anesthesiology. Rozhl.
chir. 41 no.1:38-42 Ja '62.

1. Anesteziologicka slozka SFN v Pizni, vedouci lekar MUDr. J. Minar
I chirurg. klinika lekarska fakulty KU v Pizni, prednosta doc. MUDr.
J. Spinka.

(ANESTHESIA)

FESSL, V.

2

CZECHOSLOVAKIA

MINAR, J., MD; FESSL, V., MD; SOHESKY, I., MD.

1. Anesthesiological Complex SFN (Anesteziologicka slozka SFN), Pilsen (for Minar); 2. First Surgical Clinic of the Medical Faculty of Charles University, Pilsen Branch (I. chirurgicka klinika lekarske fakulty KU se sidlem v Plzni), Pilsen (for all)

Prague, Prakticky lekar, No 5, 1963, pp 168-169

"The Danger of Ether Anesthesia in Old Patients."

MINAR, J.; FESSL, V.

Halothane as a monoanesthetic in severe craniocerebral injuries.
Rozhl. chir. 42 no.8:544-547 Ag '63.

1. Anesteziologicka slozka SFN v Plzni, vedouci lekar MUDr.
J. Minar I chirurgicka klinika lekarske fakulty KU se sidlem
v Plzni, prednosta doc. dr. J. Spinka.
(HALOTHANE) (NEUROSURGERY) (BRAIN INJURY, ACUTE)
(INTRACRANIAL PRESSURE) (HEAD INJURIES)

MINAR, J.; FESSL, V.

Factors altering the effect of peripheral muscle relaxants.
Rozhl. chir. 43 no.6:372-378 Je'64

1. Anesteziologicke oddeleni Statni fakultni nemocnice v
Plzni (vedouci: lekar MUDr. J.Minar) a I. chirurgicka kli-
nika lekarske fakulty KU [Karlovy university] v Plzni, (pred-
nosta: doc. dr. J.Spinka).

MINAR, J.; FESSL, V.

Data on resuscitation of neurosurgical patients with apnea with maintenance of cardiovascular activity. Rozhl. chir. 43 no.10: 708-710 10 '64.

1. Anestezilogické oddelení fakultní nemocnice v Plzni, (vedoucí lékař MUDr. J. Minar) a I chirurgická klinika lékařské fakulty Karlovy University v Plzni (prednosta doc. dr. J. Spinka).

MINAR, J., MUDr.; SAMAN, K.; FESSL, V.

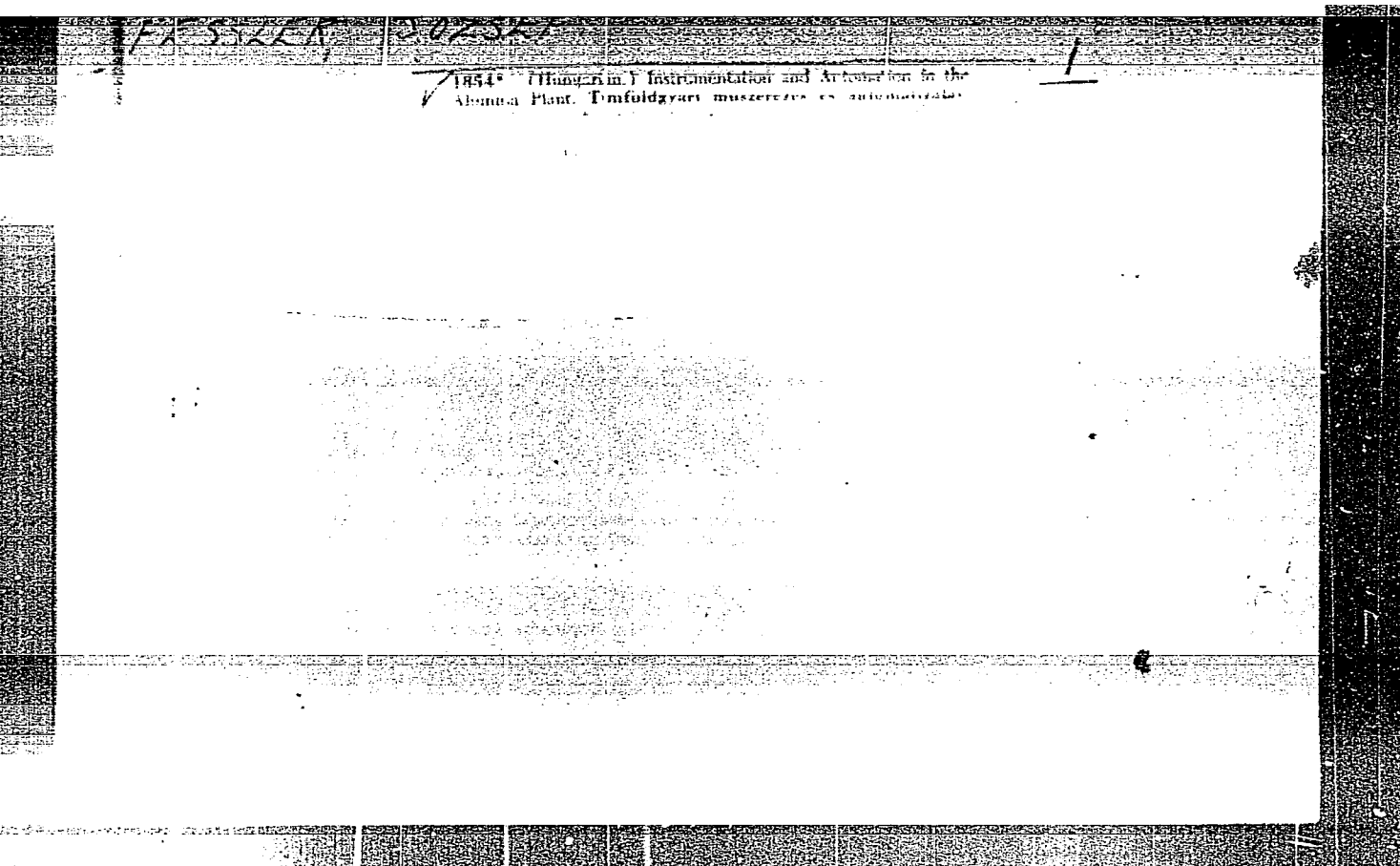
Problems and techniques of halothane anesthesia in pediatric eye surgery. Cesk. oftal. 21 no.3:172-176 My '65

1. Anesteziologicke oddeleni fakultni nemocnice v Plzni (vedouci: MUDr. J. Minar); Očni klinika (prednosta: prof. dr. R. Knobloch, DrSc.), I. chirurgická klinika (prednosta: doc. dr. J. Spinka) lékařské fakulty Karlovy University v Plzni.

FESSLER, J.; PINTER, T.

Investigation of the capacity of digesters of aluminum plants by correlation of digesting temperature and efficiency of production. p. 264 (Kohaszati Lapok. Budapest Vol. 11, no. 6, June 1956 Kohaszati Lapok. Vol. 9 (i.e. 11) no. 6)

SO: Monthly List of East European Accessions (EEAL) LC., Vol. 6, no. 7, July 1957 Uncl.



CIUCA, M., academician; POPOVICI, Marcella; NESTORESCU, N.;
ANDREESCU, Viorica; GEORGESCU, Collette; SOARE, Luiza;
DRAGOI, Tatiana; FESSLER, Nina

Research on some genetic aspects of the biological evolution
of "lytic" and "lysogenic" enteric bacteriophages. Stud.
cercet. inframicrobiol. 14 no.5:545-550 '63.

1. Membru corespondent al Academiei R.P.R. (for Andreescu).
(COLIPHAGES) (SALMONELLA PHAGES) (GENETICS)

SEFER, M., dr.; FESSLER, Nini, chim.

Changes in the serum electrophoretic pattern in experimental leptospirosis in guinea pigs. Microbiologia (Bucur) 10 no.2: 139-146 Mr-Ap'65.

1. Lucrare efectuata la Catedra a II-a de microbiologie, Institutul medico-farmaceutic, Bucuresti.

IANCU, Larisa, chim; FESSLER, Nini, chim.

Technic of extraction of DNA from *Escherichia coli* M. Microbiologia (Bucur) 10 no.2:173-175 Mr-Ap'65.

1. Incrare efectuata in Institutul de microbiologie, parazitologie si epidemiologie "Dr. I. Cantacuzino".

FEST, T.; CELEMEEN, A.; FEST, G.; ALMASI, S.

The effect of para-aminosalicylic acid on the development of
experimental goiter. Rev. sci. med. 5 no.3/4:145-148 '60.
(PARA-AMINOSALICYLIC ACID pharmacol.)
(GOITER exper.)

FESTA, G.

PA 4741

USSR/Engines, Automobile

Mar 1947

"The ZIS-120 Motor," G. Festa, 5 pp

"Avtomobil" Vol XXV, No 3

Detailed description with schematic drawings and photographs and a list of outstanding features

4741

USSR, U.

IA 12T13

USSR/Trucks - Production
Vehicles

Apr 1947

"The ZIS-150 Motor Truck," G. Festa, 4 pp

"Automobil'" Vol XXV, No 4

Description, photographs, diagrams and parametric
data on the subject vehicle.

12T13

FESTA, G.

FA 12T27

USSR/Trucks - Production
Trucks - Performance

Jun 1947

"Motor Truck ZIS-150," G. Festa, Engr, 4 pp

"Automobil'" Vol XIV, No 6

Additional information on ZIS-150 (see Vol XIV, No 4). Discussion of characteristics, which make the vehicle especially suitable for Soviet road conditions. Details on hydraulic brake system.

12T27

GERMAN, N.Ye., inzhener; ~~FESTA, G.A.~~, inzhener, laureat Stalinskoy premii, redaktor; POPOVA, S.M., tekhnicheskii redaktor.

[Catalog of spare parts for the ZIS-150 truck, the ZIS-156 compressed gas truck, and ZIS-585 and KAZ-585B dump trucks] Katalog zapasnykh chastei gruzovogo avtomobilia ZIS-150, gazoballonogo avtomobilia ZIS-156 i avtomobilei-samosvalov ZIS-585 i KAZ-585B. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 267 p. (MLRA 7:11)

1. Russia (1923- U.S.S.R.) Ministerstvo mashinostroyeniya. (Motor trucks--Apparatus and supplies)

FESTA, G.A.

ANOKHIN, V.I., kandidat tekhnicheskikh nauk; PROSVIRNIN, A.D., inzhener, retsenzent; FESTA, G.A., inzhener, retsenzent; AFANAS'YEV, L.I., kandidat tekhnicheskikh nauk, redaktor; SOKOLOVA, T.F., tekhnicheskiiy redaktor

[Soviet automobiles; reference book] Sovetskie avtomobili; spravoch-nik. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954.
725 p. (MLRA 7:10)

(Automobiles—Design and construction)

РЕДАКТОРЫ
МАМЛЕВ, Алексей Иванович; ШУТЫЙ, Леонид Rubinovich; ПЕСТА, Г.А.,
инженер, рецензент; ГЕРМАН, Н.Ye., инженер, редактор; ЗАХОВИИ,
А.Г., редактор; МОДЕЛЬ, Б.И., технический редактор

[ZIL-150 automobile] Avtomobil' ZIL-150. Perer. i dop.izd. Moskva,
Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1956. 299 p.
(Motortrucks) (MLRA 10:7)

STEPANOVA, Melizaveta Alekseyevna, inzh.; LEFAROV, Anatoliy Khristoforovich,
inzh.; GOL'D, B.V., doktor tekhn.nauk, retsenzent; ~~PESTA, G.A.~~,
inzh., red.; AVSHAROVA, Ye.G., red.izd-va; SMIRNOVA, G.V., tekhn.red.

[Blocking differentials used in motortrucks] Blokiruiushchiesia
differentsialy gruzovykh avtomobilei. Moskva, Gos.nauchno-tekhn.
izd-vo mashinostroit.lit-ry, 1960. 126 p.

(MIRA 13:12)

(Motortrucks)

FMSTA, G., Inzh.

The ZIL-130 motortruck and its family. Za rul. 18 no.1:
14-16 Ja '60. (MIRA 13:5)

1. Zamestitel' glavnogo konstruktora Moskovskogo avtozavoda
imeni Likhacheva.
(Motortrucks)

YERSHOV, Boris Vasil'yevich; ZALETAYEV, Mikhail Vasil'yevich; FEST,
G.A., red.; GRINBERG, P.I., red. izd-va; GALAKTIONOVA,
Ye.N., tekhn. red.

[Maintenance of the ZIL-164A and ZIL-164AR motortrucks]
Tekhnicheskoe obsluzhivanie avtomobilei ZIL-164A i ZIL-164AR.
Pod red. G.A.Festa. Moskva, Avtotransizdat, 1963. 155 p.
(MIRA 16:4)

1. Zamestitel' glavnogo konstruktora Moskovskogo avtomobil'nogo
zavoda im. I.A.Likhacheva(for Fest).
(Motortrucks--Maintenance and repair)

FESTA, G.

Structural measures for facilitating the maintenance of the
ZIL-130 motortruck. Avt. transp. 42 no. 5:42-45 My '64.
(MIRA 17:5)

1. Zamestitel' glavnogo konstruktora Moskovskogo avtozavoda im.
Likhacheva.

FEST, T.; CELEMEN, A.; ~~FEST, G.~~; ALMASI, S.

The effect of para-aminosalicylic acid on the development of
experimental goiter. Rev. sci. med. 5 no.3/4:145-148 '60.
(PARA-AMINOSALICYLIC ACID pharmacol.)
(GOITER exper.)

~~FEST, G.~~ [Feszt, G.]; FEST, T. [Feszt', T.]; ALMASHI, S. [Almassi, S.]

Effect of neuroplegic substances on the activity of alkaline phosphatase in the liver of rats in conditions of brun shcok. Biul. eksp. biol. i med. 49 no. 4:78-81 Sp '60. (MIRA 13:10)

1. Iz nauchno-issledovatel'skoy stantsii (dir. - deystvitel'nyy chlen Akademii nauk Rumynskoy Narodnoy Respubliki D. Mishkoltsi) Akademii Rumynskoy Narodnoy Respubliki, g. Tyrgu-Muresh, Rumyniya.

(BURNS AND SCALS) (LIVER) (PHOSPHATASES)
(PSYCHOPHARMACOLOGY)

FEST, G
FEST, T.[Feszt, T.]; FEST, G.[Feszt, G.]; KELEMEN, A.
ALMASHI, S.[Almanasi, S.] (Tyrgu-Muresh, Rumyniya)

Effect of some antituberculosis drugs on thyroid tissue. Probl.
endok. i gorm. 8 no.3:40-46 My-Je '62. (MIRA 15:6)

1. Iz nauchno-issledovatel'skoy stantsii (dir. - deystvitel'nyy
chlen Akademii nauk Rumynskoy Narodnoy Respubliki D. Mishkol'tsi)

(THYROID GLAND—TUBERCULOSIS)
(DRUGS—PHYSIOLOGICAL EFFECT)

FEST, T.; KELEMEN, A.; FEST, H.; ALMASI, S.

Experimental research concerning the action of some tranquilizing
drugs on the thyroid gland. Rev. sci. med. 6 no.3/4:157-160 '61.
(THYROID GLAND pharmacology) (TRANQUILIZING AGENTS pharmacology)

FEIST, N.Ya., red.; YELSHIN, N.N., red.; GERULIAYTIS, Yu.N., red.; LANOVSAYA,
M.P., red. izd-va; SHVETSOV, M.P., tekhn. red.

[Automatic control in chemical industries and by-product coking]
Artomatizatsiya khimicheskikh i koksokhimicheskogo proizvodstv;
sbornik statei. Pod red. N.Ya. Feista, N.N. Elshina i Yu.N.
Geruliatisa. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po
chernoi i tsvetnoi metallurgii, 1958. 377 p. (MIRA 11:10)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy nauchno-tekhnicheskii komitet.
(Chemical industries) (Coke industry) (Automatic control)

FEST, G. [Feszt, G.]; ~~FEST, M.~~ [Feszt', T.]; ALMASHI, S. [Almassi, S.]

Effect of neuroplegic substances on the activity of alkaline phosphatase in the liver of rats in conditions of brun shcok. Biul. eksp. biol. i med. 49 no. 4:78-81 Sp '60. (MIRA 13:10)

1. Iz nauchno-issledovatel'skoy stantsii (dir. - deystvitel'nyy chlen Akademii nauk Rumynskoy Narodnoy Respubliki D. Mishkoltsi) Akademii Rumynskoy Narodnoy Respubliki, g. Tyrgu-Muresh, Rumyniya.

(BURNS AND SCALS) (LIVER) (PHOSPHATASES)
(PSYCHRIOPHARMACOLOGY)